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A new record of the Persian Brook Salamander, Paradactylodon persicus (Eiselt & Steiner, 1970) (Amphibia: Caudata: Hynobiidae) in northern Iran

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INTRODUCTION

The Persian Brook Salamander, *Paradactylodon persicus* (Eiselt & Steiner, 1970) is an endemic and poorly known species of northern Iran (Baloutch & Kami 1995; Kami 1999). It was originally described as *Batrachuperus persicus* by Eiselt & Steiner (1970), but has been transferred to the genus *Paradactylodon* based on genetic studies by Zhang et al. (2006). This species has been reported from two localities only: Weyser, southeast of Chalus, in Mazandaran Province (36° 30′ 35" N and 51° 26′ 38" E) and Delmadeh village, southeast of Khalkhal, in Ardabil Province (37° 22′ 34" N and 48° 47′ 35" E) (Kami 2004; Ebrahimi et al., 2004) (Fig. 1). Here, we report a new record of this species in Hyrcanian forest, in Gilan Province, Iran.

RESULTS

During our field survey in June 2010, a single specimen was collected in Dasht-e-Daman Yeylagi, in Rezvan Shahr city of Gilan Province (37° 27' 53" N and 48° 47' 10" E) at an elevation of 1622 m a. s. l. (Fig. 1). This specimen is a subadult (Fig. 2a–b) and it was identified as *Paradactylodon persicus* based on external morphological characters which mentioned by Baloutch & Kami (1995). Because this is a threatened species in Iran (Papenfuss et al. 2011; Ahmadzadeh & Kami 2009), it was released into the natural habitat after morphological examination. The characteristic features of this specimen are as the following: total length 23 mm; snout-vent length

90 mm; tail length 120 mm; head large, 20 mm in length; vomerine teeth in two arch-shaped rows; snout rounded; fore and hind limbs with four digits; tail flattened laterally, with round-tapered end; dorsal head and body, as well as upper surface of tail brownish with yellow spots and marblings; belly cream without pattern (Fig. 2a–b).

Paradactylodon persicus inhabits the mountainous streams and brooks, with cool, fast-flowing water (Baloutch & Kami 1995; Kami 1999; Ahmadzadeh & Kami 2009). Like the Delmadeh habitat in Ardabil Province, the habitat reported here is also located in a non-forestry area (Ahmadzadeh & Kami 2009). The specimen was found under a stone close by a stream on the steep slope of Alborz Mountains, exposed to the Caspian Sea.

REFERENCES

Ahmadzadeh F & Kami HG (2009) Distribution and conservation status of the Persian Brook Salamander, *Batrachuperus* (*Paradactylodon*) *persicus* (Amphibia: Caudata: Hynobiidae) in north-western Iran. Iranian Journal of Animal Biosystematics (IJAB) 5: 9–15

Baloutch M & Kami HG (1995) Amphibians of Iran. Tehran university Publication, Tehran (in Persian): 177 pp.

Ebrahimi M, Kami HG, Stöck M (2004) First description of egg saes and early larval development in hynobiid salamanders (Urodela, Hynobiidae, *Batrachuperus*) from north-eastern Iran. Asiatic Herpetological Research 10: 168–175

Eiselt J, Steiner HM (1970) Erstfund eins hynobiiden Molehes in Iran. Annalen des Naturhistorischen Museum Wien 74: 77–90



Fig. 1. Map showing the two former valid localities and new reported locality of Paradactylodon persicus in Iran.

Kami HG (1999) Additional specimens of the Persian Mountain Salamander, *Batrachuperus persicus*, from Iran (Amphibia : Hynobiidae). Zoology in the Middle East 19: 37–42 Kami HG (2004) The biology of the Persian Mountain Salamander, *Batrachuperus persicus* (Amphibia, Caudata, Hynobidae)

in Golestan Province, Iran. Asiatic Herpetological Resaerch 10: 182–190

Papenfuss T, Anderson S, Kuzmin S, Rastegar-Pouyani N (2010) Batrachuperus persicus. In: IUCN Red List of Threatened Species, online at www.iucnredlist.org, accessed on January 20, 2011





Fig. 2a-b. Paradactylodon persicus from Dasht-e-Daman Yeylagi in Rezvan Shahr city of Gilan Province.





Fig. 3a-b. The newly recorded habitat of *Paradactylodon persicus* in the Dasht-e-Daman Yeylagi in Rezvan Shahr city of Gilan Province.

Zhang P, Yue-Qin C, Hui Z, Yi-Fei L, Xiu-Ling Wg, Theodore JP, David Wake B, Liang-Hu Q (2006) Phylogeny, evolution, and biogeography of Asiatic Salamanders (Hynobiidae). Proceedings of the National Academy of Sciences of the United States of America 103: 7360–7365

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